EFFICIENT SEPARATION OF SOLIDS AND LIQUIDS. PHARMACEUTICALS STARCH CHEMICAL INDUSTRIES

Whirler Features

- Automatic heel cake adjustment
- Oil-lubricated bearings
- Solids discharge by chute or by screw conveyor
- Drive: electric motor and V-belts, or with hydraulic drive with variable or constant speed
- Automatic and manual operation with either microprocessor or pneumatic controller
- Separation of Drive area / Process area
- Removal of shaft from the rear
- Easy cloth changing
- Through wall construction

Peeler Centrifuge

www.whirlercentrifugals.com
WHIRLER horizontal peeler centrifuges are batch operated Filtration centrifuges known for their reliable long running performance at high throughput, up to 50% higher output in dryness or tonnage compared to Standard Centrifuges. These machines used in many processes, primarily in the bulk chemicals, One chemicals, and food industries, notably starch from rice, maize, tapioca, potato etc. The horizontal rotor assembly is cantilever mounted and, provided with specially designed rotary basket. A convenient housing door provides access to the basket and all process components for ease of maintenance. Adding hydraulic Fluid coupling, customized PLC controls and intuitive instrumentation enables the peeler centrifuge to be optimally adapted to a multitude of processing requirements for peak performance. This machines works in continuous batch type mode with each batch timing varied from 1.5 hours to less than five minutes depending upon materials. Compared with normal centrifuge, Horizontal Peeler centrifuge has a high capacity and separation effect. The separation adopts not only the centrifugal force, but also the gravity force. Capacity of this centrifuge can be higher than normal scraper centrifuge as 40%-60% and the moisture content of filter cake is lower.

Main applications

1. Bulk chemicals
   a. Petrochem intermediates
   b. fertilizers
   c. chlorides
   d. sulfates
   e. calcium compounds
   f. sodium compounds

2. Fine chemicals
   a. Aluminum fluoride
   b. amino acids
   c. bleaching agents
   d. pesticides
   e. catalysts
   f. dyestuffs

3. Pharmaceuticals/related
   a. APIs
   b. vitamins
   c. salicylic acid
   d. citric acid
   e. ascorbic acid
   f. calcium citrate
   g. antibiotics

4. Plastics/related
   a. ABS
   b. resins
   c. melamine
   d. PE
   e. PP
   f. antioxidant agents

5. Foodstuff/related
   a. Native and modified starches
   b. artificial sweeteners
   c. vanillin
   d. caffeine

Typical Process Cycle

Feeding: The Suspension is fed from the Storage to the basket rotating at full operational speed

Removal of mother liquor: Under the influence of the centrifugal force the Liquid is drained from the solids, through filter elements (filter cloth). The solids are collected as ‘cake’ in the basket.

Washing: If required, in order to remove the traces of mother liquor washing facility can be provided to thoroughly wash the solids during separation.

Re-drying: After giving wash or other treatment solids are further allowed to dry.

Discharging: Solids are ‘peeled’ off by means of full-basket-width scrapper and is discharged through chute in front cover of the machine or conveyed by discharged screw.

All Our Peeler Centrifuge Model Includes Complete Auto Cycle Automation, VFD Drive, Full Report On Cycle Time, Production and Running Performance.

All Our Pharma GMP Machine Are Fully Washable & Cleanable. All Our GMP Model Comes With Anti Vibration Support And Inertia Mount For Clean Room Installation. All Non Contact Part In Pharma GMP Models Are Covered With SS316 Cover For Protection And Easy Cleaning As Well As Sound Proofing.

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MODEL    PG250H    PG450H    PG630H    100H2.0  120H2.1  140H3.1  160H4.0  180H5.0
POWER HP 10        20        30        40        75        100       150       175
Basket
Diameter (mm) 250      450       630       1000      1200      1400      1600      1800
Length (mm)   125      225       325       600       630       780       900       1000
Volume (Liter)8         24        45        160       270       480       760       1100
Max. Charge (Kg. Starch) 12       30        60        170       280       500       800       1150
Filtration Area 0.098    0.31      1.18      1.8       2.9       3.4       4.5       5.6
Speed(Max) RPM 2800      2400      2000      1400      1200      1000      960       840
G” Value(Max) 1095      1450      1400      1200      1000      800       700
Useful basket Volume 8         24        45        160       270       480       780       1100
Cake Collected / batch (Kg@35% Moist) 6        20        35        100       200       300       650       900
Average Cycle/Hr 12       12        12        12        10       10        8         8
Centrifuge (Kg) 72        240       420       1200      2000      2200      5200      7200
Output/Hr 1.44     2.88       5         26        44        66        110       158
Capacity Per Day (Tonne) .

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Centrifuges • Laundry Equipments • Fluid Coupling • Vacuum Pumps • Vacuum Impregnation Systems
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